

SEQUENCE LISTING

<110> Fuso Pharmaceutical Industries Ltd.

<120> Protein expression vector and use thereof

5 <130> 661637

<150> JP 10-331515

<151> 1998-11-20

<160> 19

10 <210> 1

<211> 117

<212> DNA

<213> Artificial Sequence

<220>

15 <223> Designed oligonucleotide to construct plasmid pTrypHis

<400> 1

aagcttggt agcaacacca tgaatctact cctgacccctt acctttgttg ctgctgctgt 60

tgctgcccc tttcaccatc accatcacca tgacgacgat gacaaggatc cgaattc 117

20

<210> 2

<211> 117

<212> DNA

<213> Artificial Sequence

25 <220>

<223> Designed oligonucleotide to construct plasmid pTrypHis

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gaattcggat ccttgatc gtcgtcatgg tgatggatg ggtgaaagg ggcagcaaca 60

5 gcagcagcaa caaaggtaag gatcaggagt agattcatgg tggtagtagc caagctt 117

<210> 3

<211> 15

<212> DNA

10 <213> Artificial Sequence

<220>

<223> Designed oligonucleotide primer to amplify neurosin-encoding sequence

<400> 3

15 ttggtgcatg gcgga 15

<210> 4

<211> 20

<212> DNA

20 <213> Artificial Sequence

<220>

<223> Designed oligonucleotide primer to amplify neurosin-encoding sequence

<400> 4

25 ggaattcact tggcctgaat 20

<210> 5

<211> 26

<212> DNA

5 <213> Artificial Sequence

<220>

<223> Designed oligonucleotide primer to amplify a portion of plasmid  
pTrypHis/Neurosin

10 <400> 5

ctaagcttga cgacgatgac aagttg

26

<210> 6

<211> 27

15 <212> DNA

<213> Artificial Sequence

<220>

<223> Designed oligonucleotide primer to amplify a portion of plasmid  
pTrypHis/Neurosin

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<400> 6

tcctcgagac ttggcctgaa tggtttt

27

<210> 7

25 <211> 26

<212> DNA

<213> Artificial Sequence

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<223> Designed oligonucleotide primer to amplify a portion of plasmid  
pTrypHis/Neurosin

<400> 7

ccaagcttca ccatcaccat caccat

26

<210> 8

<211> 99

<212> DNA

<213> Artificial Sequence

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<223> Designed oligonucleotide to construct plasmid pSecTrypHis

<400> 8

aagcttggct agcaacacca tgaatctact cctgacctt acctttgttg ctgctgctgt 60

tgctgcccc tttgacgacg atgacaagga tccgaattc

99

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<211> 99

<212> DNA

<213> Artificial Sequence

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<223> Designed oligonucleotide to construct plasmid pSecTrypHis

<400> 9

gaattcggat ccttgatcatc gtcgtcaaag ggggcagcaa cagcagcagc aacaaaggta 60

5 aggatcagga gtagattcat ggtgttgcta gccaaagctt 99

<210> 10

<211> 35

<212> DNA

10 <213> Artificial Sequence

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<223> Designed oligonucleotide primer to amplify a portion of plasmid  
pSecTrypHis/Neurosin

15 <400> 10

gcgctagcag atctccatga atctactcct gatcc 35

<210> 11

<211> 29

20 <212> DNA

<213> Artificial Sequence

<220>

<223> Designed oligonucleotide primer to amplify a portion of plasmid  
pSecTrypHis/Neurosin

25

<400> 11

tgaagcttgc catggaccaa cttgtcatc

29

<210> 12

5

<211> 17

<212> DNA

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10

pTrypSigTag

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gcacagtcga ggctgat

17

15

<210> 13

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<212> DNA

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pFBTrypSigTag

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caaatgtggt atggctg

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<212> DNA

<213> Homo sapiens

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<400> 14

ttg gtg cat ggc gga ccc tgc gac aag aca tct cac ccc tac caa gct 48

Leu Val His Gly Gly Pro Cys Asp Lys Thr Ser His Pro Tyr Gln Ala

1 5 10 15

10 gcc ctc tac acc tcg ggc cac ttg ctc tgt ggt ggg gtc ctt atc cat 96

Ala Leu Tyr Thr Ser Gly His Leu Leu Cys Gly Gly Val Leu Ile His

20 25 30

cca ctg tgg gtc ctc aca gct gcc cac tgc aaa aaa ccg aat ctt cag 144

Pro Leu Trp Val Leu Thr Ala Ala His Cys Lys Lys Pro Asn Leu Gln

15 35 40 45

gtc ttc ctg ggg aag cat aac ctt cgg caa agg gag agt tcc cag gag 192

Val Phe Leu Val Arg Ala Val Ile His Pro Asp Tyr Asp Ala Ala Ser

50 55 60

cag agt tct gtt gtc cgg gct gtg atc cac cct gac tat gat gcc gcc 240

20 His Asp Gln Asp Gly Lys His Asn Leu Arg Gln Arg Glu Ser Ser Gln

65 70 75 80

agc cat gac cag gac atc atg ctg ttg cgc ctg gca cgc cca gcc aaa 288

Glu Gln Ser Ser Val Ile Met Leu Leu Arg Leu Ala Arg Pro Ala Lys

85 90 95

25 ctc tct gaa ctc atc cag ccc ctt ccc ctg gag agg gac tgc tca gcc 336

Leu Ser Glu Leu Ile Gln Pro Leu Pro Leu Glu Arg Asp Cys Ser Ala

100

105

110

aac acc acc agc tgc cac atc ctg ggc tgg ggc aag aca gca gat ggt 384

Asn Thr Thr Ser Cys His Ile Leu Gly Trp Gly Lys Thr Ala Asp Gly

5

115

120

125

gat ttc cct gac acc atc cag tgt gca tac atc cac ctg gtg tcc cgt 432

Asp Phe Pro Asp Thr Ile Gln Cys Ala Tyr Ile His Leu Val Ser Arg

130

135

140

gag gag tgt gag cat gcc tac cct ggc cag atc acc cag aac atg ttg 480

10

Glu Glu Cys Glu His Ala Tyr Pro Gly Gln Ile Thr Gln Asn Met Leu

145

150

155

160

tgt gct ggg gat gag aag tac ggg aag gat tcc tgc cag ggt gat tct 528

Cys Ala Gly Asp Glu Lys Tyr Gly Lys Asp Ser Cys Gln Gly Asp Ser

165

170

175

15

ggg ggt ccg ctg gta tgt gga gac cac ctc cga ggc ctt gtg tca tgg 576

Gly Gly Pro Leu Val Cys Gly Asp His Leu Arg Gly Leu Val Ser Trp

180

185

190

ggt aac atc ccc tgt gga tca aag gag aag cca gga gtc tac acc aac 624

Gly Asn Ile Pro Cys Gly Ser Lys Glu Lys Pro Gly Val Tyr Thr Asn

20

195

200

205

gtc tgc aga tac acg aac tgg atc caa aaa acc att cag gcc aag tga 672

Val Cys Arg Tyr Thr Asn Trp Ile Gln Lys Thr Ile Gln Ala Lys \*\*\*

210

215

220

25

&lt;210&gt; 15



<211> 223

<212> PRT

<213> Homo sapiens

5 <400> 15

Leu Val His Gly Gly Pro Cys Asp Lys Thr Ser His Pro Tyr Gln Ala

1 5 10 15

Ala Leu Tyr Thr Ser Gly His Leu Leu Cys Gly Gly Val Leu Ile His

20 25 30

10 Pro Leu Trp Val Leu Thr Ala Ala His Cys Lys Lys Pro Asn Leu Gln

35 40 45

Val Phe Leu Val Arg Ala Val Ile His Pro Asp Tyr Asp Ala Ala Ser

50 55 60

His Asp Gln Asp Gly Lys His Asn Leu Arg Gln Arg Glu Ser Ser Gln

15 65 70 75 80

Glu Gln Ser Ser Val Ile Met Leu Leu Arg Leu Ala Arg Pro Ala Lys

85 90 95

Leu Ser Glu Leu Ile Gln Pro Leu Pro Leu Glu Arg Asp Cys Ser Ala

100 105 110

20 Asn Thr Thr Ser Cys His Ile Leu Gly Trp Gly Lys Thr Ala Asp Gly

115 120 125

Asp Phe Pro Asp Thr Ile Gln Cys Ala Tyr Ile His Leu Val Ser Arg

130 135 140

Glu Glu Cys Glu His Ala Tyr Pro Gly Gln Ile Thr Gln Asn Met Leu

25 145 150 155 160

Cys Ala Gly Asp Glu Lys Tyr Gly Lys Asp Ser Cys Gln Gly Asp Ser

165

170

175

Gly Gly Pro Leu Val Cys Gly Asp His Leu Arg Gly Leu Val Ser Trp

180

185

190

5 Gly Asn Ile Pro Cys Gly Ser Lys Glu Lys Pro Gly Val Tyr Thr Asn

195

200

205

Val Cys Arg Tyr Thr Asn Trp Ile Gln Lys Thr Ile Gln Ala Lys. \*\*\*

210

215

220

10 <210> 16

<211> 135

<212> DNA

<400> 16

15 atg gag aca gac aca ctc ctg cta tgg gta ctg ctg ctc tgg gtt cca 48

Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro

1

5

10

15

ggt tcc act ggt gac gcg gcc cag ccg gcc agg cgc gcg cgc cgt acg 96

Gly Ser Thr Gly Asp Ala Ala Gln Pro Ala Arg Arg Ala Arg Arg Thr

20

20

25

30

aag ctt cac cat cac cat cac cat gac gac gat gac aag 135

Lys Leu His His His His His His Asp Asp Asp Asp Lys

35

40

45

25 <210> 17

&lt;211&gt; 45

&lt;212&gt; PRT

&lt;400&gt; 17

5 Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro

1 5 10 15

Gly Ser Thr Gly Asp Ala Ala Gln Pro Ala Arg Arg Ala Arg Arg Thr

20 25 30

Lys Leu His His His His His His Asp Asp Asp Asp Lys

10 35 40 45

&lt;210&gt; 18

&lt;211&gt; 120

&lt;212&gt; DNA

15

&lt;400&gt; 18

atg aat cta ctc ctg atc ctt acc ttt gtt gca gct gct gtt gct gcc 48

Met Asn Leu Leu Leu Ile Leu Thr Phe Val Ala Ala Ala Val Ala Ala

1 5 10 15

20 ccc ttt gat gat gat gac aag ttg gtg cat ggc aag ctt cac cat cac 96

Pro Phe Asp Asp Asp Asp Lys Leu Val His Gly Lys Leu His His His

20 25 30

cat cac cat gac gac gat gac aag 120

His His His Asp Asp Asp Asp Lys

25 35 40

<210> 19

<211> 40

<212> PRT

5

<400> 19

Met Asn Leu Leu Leu Ile Leu Thr Phe Val Ala Ala Val Ala Ala

1

5

10

15

Pro Phe Asp Asp Asp Asp Lys Leu Val His Gly Lys Leu His His His

10

20

25

30

His His His Asp Asp Asp Asp Lys

35

40

15